

## ABSTRACT OF THE DISCLOSURE

A computer implemented method modifies an experimental electron density map. A set of selected known experimental and model electron density maps is provided and standard templates of electron density are created from the selected experimental and model electron density maps by clustering and averaging values of electron density in a spherical region about each point in a grid that defines each selected known experimental and model electron density maps. Histograms are also created from the selected experimental and model electron density maps that relate the value of electron density at the center of each of the spherical regions to a correlation coefficient of a density surrounding each corresponding grid point in each one of the standard templates. The standard templates and the histograms are applied to grid points on the experimental electron density map to form new estimates of electron density at each grid point in the experimental electron density map.